09/697186

STN Search Summary => d his FILE 'CAPLUS' ENTERED AT 10:33:52 ON 28 AUG 2002 L11907 S (KANAMYCIN? (S) RESIST? (S) GENE?) L2 44 S L1 (P) THERM? L3 16 S L1 AND REVIEW L416 S L1 AND REVIEW/DT L5 44 S L2 NOT L4 L6 106 S L1 (P) (THERM? OR TEMPERATURE?) L7 62 S L6 NOT L2 L8 38 S L7 AND (TEMPERATUR? (S) SENSITI?) ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS L4ΑN 2001:765914 CAPLUS Molegular basis of aminoglycoside resistance in Mycobacterium TIΑU Afrisa, Jose A.; Martin, Carios Recent Research Developments in Antimicrobial Agents & Chemotherapy SO (2000), 4(Pt. 1), 1-10 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS L42001:58/777 CAPLUS ΑN Diagnosis of anti-mycobacterial drug resistance of Tubercle bacillus by TIDNA chips 🕉 yuzuki, Yasuhiko; Ichihara, Tatsuo; Tamaru, Aki; Ruhul, Amin; Katsukawa, AU Chihiro; Makino, Masanao; Abe, Chiyoji DNA Chippu Oyo Gijutsu (2000), 159-170. Editor(s): Matsunaga, Tadashi. ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS L41993,56099 CAPLUS ANBiosafety of kanamycin-resistant transgenic plants ΤI Nap, Jan Peter; Bijvoet, Jacques; Stiekema, Willem J. ΑU fransgenic Res. (1992), 1(6), 239-49 SO ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS L41989; 420547 CAPLUS ΑN Analyzing the molecular components of bacterial aminoglycoside resistance TΙ ΑU Perlin, Michael H. SAAS Bull. Biochem. Biotechnol. (1989), 2, 62-6

- ANSWER 2 OF 44 CAPLUS COPYRIGHT 2002 ACS L5
- ΑN 2001:759391 CAPLUS
- Disruption of Thermus thermophilus genes by homologous recombination using a thermostable kanamycin -resistant marker
- Hashimoto, Y.; Yano, T.; Kuramitsu, S.; Kagamiyama, H. ΑU
- SO FEBS Letters (2001), 506(3), 231-234

- L5 ANSWER 8 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 2001:328733 CAPLUS
- TI Kanamycin nucleotidyltransferase thermostable mutants and use as selectable marker for screening of thermophilic bacteria using it
- IN Yokoyama, Shigeyuki; Hoseki, Jun; Yano, Takato; Koyama, Yoshinori; Kuramitsu, Shigenori; Kagamiyama, Hiroyuki
- SO Jpn. Kokai Tokkyo Koho, 15 pp.
- LA Japanese

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| '990 A | 3 200 | 10516 | | |
| -309616 A | 199 | 91029 | | |
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- L5 ANSWER 9 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 2000:798869 CAPLUS
- Advances in development of a genetic system for Thermoanaerobacterium spp.: expression of genes encoding hydrolytic enzymes, development of a second shuttle vector, and integration of genes into the chromosome
- AU Mai, Volker; Wiegel, Juergen
- SO Applied and Environmental Microbiology (2000), 66(11), 4817-4821
- L5 ANSWER 11 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 2000:212904 CAPLUS
- TI Expression of Clostridium thermocellum endoglucanase gene in Lactobacillus gasseri and Lactobacillus johnsonii and characterization of the genetically modified probiotic Lactobacilli
- AU Cho, Jaie-Soon; Choi, Yun-Jaie; Chung, Dae-Kyun
- SO Current Microbiology (2000), 40(4), 257-263
- L5 ANSWER 12 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 2000:116093 CAPLUS
- TI Gene replacement in Gram-negative bacteria: the pMAKSAC vectors
- AU Favre, Didier; Viret, Jean-Francois
- SO / BioTechniques (2000), 28(2), 198, 200, 202, 204
- L5 ANSWER 13 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1999:813089 CAPLUS
- TI Directed evolution of thermostable kanamycinresistance gene: A convenient selection marker for Thermus thermophilus
- AU Hoseki, Jun; Yano, Takato; Koyama, Yoshinori; Kuramitsu, Seiki; Kagamiyama, Hiroyuki
- SO Journal of Biochemistry (Tokyo) (1999), 126(5), 951-956
- L5 ANSWER 14 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1999, 697645 CAPLUS
- TI A High-Transformation-Efficiency Cloning Vector for Thermus thermophilus
- AU de Grado, Myriam; Castan, Pablo; Berenguer, Jose
- SO Plasmid (1999), 42(3), 241-245

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 L5
 ΑN
      1998:519838 CAPLUS
 TI
     Thermophile gene transfer using a chromosomal
     gene and a thermostable derivative of the
     kanamycin-resistance gene
     Weber, J. Mark; Demirjian, David C.; Casadaban, Malcolm J.; Pagratis,
 ΙN
     Nikos C.; Vonstein, Veronika
 SO
     U.S., 24 pp., Cont. of U.S. Ser. No. 265,522, abandoned.
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
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 PΙ
     US 5786174
                       Α
                            19980728
                                           US 1997-790309
                                                            19970128
     US 5872238
                       Α
                            19990216
                                           US 1997-912794
                                                            19970818
     US 6350591
                       В1
                            20020226
                                           US 1999-250585
                                                            19990216
PRAI US 1994-265522
                       В1
                            19940624
     US 1995-496932
                       B1
                            19950630
     US 1997-912794
                       Α1
                            19970818
L5
     ANSWER 17 OF 44 CAPLUS COPYRIGHT 2002 ACS
AN
     19\7:\785550 CAPLUS
     Molycular cloning and sequence analysis of the lysR gene from the
TΙ
     extremely thermophilic eubacterium, Thermus thermophilus HB27
ΑIJ
     Kosuge, Takehide; Hoshino, Takayuki
SO
    FEMS Microbiology Letters (1997), 157(1), 73-79
     ANSWER 18 OF 44 CAPLUS COPYRIGHT 2002 ACS
L5
     1997:504779 CAPLUS
ΑN
TI
     Identification of a thermophilic plasmid origin and its cloning within a
     new Thermus-E. coli shuttle vector
ΑU
     Wayne, Jay; Xu, Shuang-yong
     Gene (1997), 195(2), 321-328
SO
     ANSWER 18 OF 44 CAPLUS COPYRIGHT 2002 ACS
L5
ΑN
     1997:177719 CAPLUS
     Transformation of Thermoanaerobacterium sp. strain JW/SL-YS485 with
TΙ
     plasmid pIKM1 conferring kanamycin resistance
ΑU
     Maxí, Volker; Lorenz, W. Walter; Wiegel, Juergen
     EMS Microbiology Letters (1997), 148(2), 163-167
SO
L5
     ANSWER 20 OF 44 CAPLUS COPYRIGHT 2002 ACS
ΑN
     1997:24482 CAPLUS
TΙ
     Fusion with ribosomal protein L32 increased the in vivo thermostability of
     kanamycin nucleotidyltransferase in Thermus thermophilus
ΑU
     Maseda, Hideaki; Hoshino, Takayuki
SO
     Journal of Fermentation and Bioengineering (1996), 82(6), 525-530
L5
     ANSWER 21 OF 44 CAPLUS COPYRIGHT 2002 ACS
ΑN
     1996:307485 CAPLUS
     Plasmid vector containing DNA fragment for replication of cryptic plasmids
TI
     of Thermus and kanamycin resistance marker
     for genetic engineering in Thermus
ΙN
     Hoshino, Takayuki; Nakahara, Tadaatsu
PA
    Mitsubishi Chem Corp, Japan
LA
     Japanese
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                     ____
PΙ
    JP 08070869
                     A2
                           19960319
                                          JP 1994-210154
                                                            19940902
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- L5 ANSWER 23 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1995:652530 CAPLUS
- TI A chimeric gene which can confer thermostable kanamycin resistance upon thermophilic bacteria in the genus Thermus
- IN Lasa Uzcudun, Inigo; Fernandez Herrero, Luis Angel; De Grado Sanz, Myriam; Berenger Carlos, Jose
- PA Universidad Autonoma de Madrid, Spain
- DT Patent
- LA Spanish PATENT NO. KIND DATE APPLICATION NO. DATE ----------PΙ ES 2067414 Α1 19950316 ES 1993-1522 19930707 ES 2067414 В1 19950916
- L5 ANSWER 24 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1995:554576 CAPLUS
- TI Screening and analysis of DNA fragments that show promoter activities in Thermus thermophilus
- AU Maseda, Hideaki; Hoshino, Takayuki
- SO FEMS Microbiol. Lett. (1995), 128(2), 127-34
- L5 ANSWER 25 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1995:411146 CAPLUS
- TI A chromosome integration system for stable gene transfer into Thermus flavus
- AU Weber, J. Mark; Johnson, Scot P.; Vonstein, Veronika; Casadaban, Malcolm J.; Demirjian, David C.
- SO Bio/Technology (1995), 13(3), 271-5
- L5 ANSWER 27 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1994:49904 CAPLUS
- TI Plasmid marker rescue transformation in Thermus thermophilus
- AU Hoshino, Takayuki; Maseda, Hideaki; Nakahara, Tadaatsu
- SO J. Ferment. Bioeng. (1993), 76(4), 276-9
- L5 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1993:510559 CAPLUS
- TI Vectors for enzyme gene expression in thermophilic bacteria
- IN Nakayama, Noryuki
- PA Nippon Electric Co, Japan
- SO Jpn. Kokai Tokkyo Koho, 5 pp.
- DT Patent

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LA Japanese

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| ΡI | JP 05115285 | A2 | 19930514 | JP 1991-305537 | 19911025 |

- L5 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1992:525544 CAPLUS
- TI Insertional mutagenesis in the extreme thermophilic eubacteria Thermus thermophilus HB8
- AU Lasa, I.; Caston, J. R.; Fernandez-Herrero, L. A.; De Pedro, M. A.; Berenguer, J.
- SO Mol. Microbiol. (1992), 6(11), 1555-64

- L5 ANSWER 31 OF 44 CAPLUS COPYRIGHT 2002 ACS
- AN 1992:190165 CAPLUS
- TI Crystallization and preliminary crystallographic analysis of a thermostable mutant of kanamycin nucleotidyltransferase
- AU Kanikula, Agnes M.; Liao, Hans H.; Sakon, Joshua; Holden, Hazel M.; Rayment, Ivan
 - SO Arch. Biochem. Biophys. (1992), 295(1), 1-4
 - L5 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2002 ACS
 - AN 1991:465722 CAPLUS
 - TI Effect of temperature on the expression of wild-type and thermostable mutants of kanamycin nucleotidyltransferase in Escherichia coli
 - AU Liao, Hans H.
 - SO Protein Expression Purif. (1991), 2(1), 43-50
 - L5 ANSWER 33 OF 44 CAPLUS COPYRIGHT 2002 ACS
 - AN 1991:/158413 CAPLUS
 - TI Increased efficiency of transformation of Bacillus stearothermophilus by a plasmid carrying a thermostable kanamycin resistance marker
 - AU Ijao, Hans H.; Kanikula, Agnes M.
 - SO /Curr. Microbiol. (1990), 21(5), 301-6
 - L5 ANSWER 35 OF 44 CAPLUS COPYRIGHT 2002 ACS
 - AN 1987:61/2925 CAPLUS
 - TI A series of Tn5 variants with various drug-resistance markers and suicide vector for transposon mutagenesis
 - AU Sasakawa, Chihiro; Yoshikawa, Masanosuke
 - SO Gene (1987), 56(2-3), 283-8
 - L5 ANSWER 36 OF 44 CAPLUS COPYRIGHT 2002 ACS
 - AN 1987:4531/18 CAPLUS
 - TI Nucleotide sequence of the kanamycin resistance determinant of the pneumococcal transposon Tn1545: evolutionary relationships and transcriptional analysis of aphA-3 genes
 - AU Caillaud, Frederic; Trieu-Cuot, Patrick; Carlier, Cecile; Courvalin, Patrice
 - SO /MGG, Mol. Gen. Genet. (1987), 207(2-3), 509-13
 - L5 ANSWER 38 OF 44 CAPLUS COPYRIGHT 2002 ACS
 - AN 1986: 4/13431 CAPLUS
 - TI Construction of plasmids for the transformation of Methanobacterium thermoautotrophicum
 - AU F@ldman, Daniel; Yang, Shang Tian; Ho, Nancy W. Y.
 - SO Biotechnol. Bioeng. Symp. (1986), 15(Symp. Biotechnol. Fuels Chem., 7th, 1985), 235-40
 - L5 ANSWER 40 OF 44 CAPLUS COPYRIGHT 2002 ACS
 - AN 1985:40744 CAPLUS
 - TI Enzymic and nucleotide sequence studies of a kanamycin-inactivating enzyme encoded by a plasmid from thermophilic bacilli in comparison with that encoded by plasmid pUB110
 - AU Matsumura, Masazumi; Katakura, Yoshio; Imanaka, Tadayuki; Aiba, Shuichi
 - SO J. Bacteriol. (1984), 160(1), 413-20

- ANSWER 42 OF 44 CAPLUS COPYRIGHT 2002 ACS L5
- AN
- 1981:205251 CAPLUS
 The region controlling the thermosensitive effect of plasmid Rts1 on host ΤI growth is separate from the Rts1 replication region
- Yamamoto, Tatsuo; Finver, Shelly; Yokota, Takeshi; Bricker, James; Kaji, ΑU Akira
- SO /J. Bacteriol. (1981), 146(1), 85-92
- ANSWER 8 OF 38 CAPLUS COPYRIGHT 2002 ACS 1999:805655 CAPLUS L8
- ΑN
- TΙ A set of temperature sensitive-replication/segregation and temperature resistant plasmid vectors with different copy numbers and in an isogenic background (chloramphenicol, kapamycin, lacZ, repA, par, polA)
- Hashimoto-Gotoh, T.; Yamaguchi, M.; Yasojima, K.; Tsujimura, A.; ΑU Wakabayashi, Y.; Watanabe, Y.
- Gene (2000), 241(1), 185-191

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FILE 'CAPLUS' ENTERED AT 11:19:36 ON 28 AUG 2002
    L1
               9452 S KANAMYCIN
    L2
                886 S L1 (S) (RESISTANCE? (2W) GENE?)
                430 S L1 (S) (NUCLEOTIDYLTRANSFERASE? OR NUCLEOTIDYL? OR ?TRANSFERA
    L3
    L4
               1251 S L2 OR L3
    L5
                  71 S L4 (P) (THERMOSTABLE OR (TEMPERATURE? (2W) SENSITIVE) OR THER
    L6
                 30 S L5 AND (MUTANT OR MUTATE)
    L7
                 30 S L5 AND (?MUTANT? OR ?MUTATE?)
    L8
                 70 S L5 AND (?MUTANT? OR ?MUTATE? OR GENE?)
    L9
                 26 S L2 (P) THERM?
    L10
                 45 S L5 NOT L9
    L11
                 22 S L10 NOT L7
    L7
         ANSWER 14 OF 30 CAPLUS COPYRIGHT 2002 ACS
    ΑN
         1993:229126 CAPLUS
         Thermostable mutants of kanamycin
    TΙ
         nucleotidyltransferase are also more stable to proteinase K, urea,
         detergents, and water-miscible organic solvents
    ΑU
         Liao, Hans H.
    SO
         Enzyme Microb. Technol. (1993), 15(4), 286-92
    L7
         ANSWER 17 OF 30 CAPLUS COPYRIGHT 2002 ACS
    ΑN
         1992:190165 CAPLUS
    ΤI
         Crystallization and preliminary crystallographic analysis of a
         thermostable mutant of kanamycin
0
         nucleotidyltransferase
    ΑU
         Kanikula, Agnes M.; Liao, Hans H.; Sakon, Joshua; Holden, Hazel M.;
         Rayment, Ivan
         Arch. Biochem. Biophys. (1992), 295(1), 1-4
    SO
    L7
         ANSWER 21 OF 30 CAPLUS COPYRIGHT 2002 ACS
    AN
         1991:38434 CAPLUS
         Does single-amino-acid replacement work in favor of or against improvement
    TΙ
0
         of the thermostability of immobilized enzyme?
         Koizumi, Junichi; Zhang, Min; Imanaka, Tadayuki; Aiba, Shuichi
    ΑU
    SO
         Appl. Environ. Microbiol. (1990), 56(11), 3612-14
    L7
         ANSWER 22 OF 30 CAPLUS COPYRIGHT 2002 ACS
    ΑN
         1988:90894 CAPLUS
    TI
         Role of tyrosine-80 in the stability of kanamycin nucleotidyltransferase
         analyzed by site-directed mutagenesis
         Matsumura, Masazumi; Yahanda, Saburo; Yasumura, Shigeyoshi; Yutani,
    ΑU
         Katsuhide; Aiba, Shuichi
    SO
         Eur. J. Biochem. (1988), 171(3), 715-20
    L7
         ANSWER 25 OF 30 CAPLUS COPYRIGHT 2002 ACS
    AN
         1986:621212 CAPLUS
    TΙ
         Cumulative effect of intragenic amino acid replacements on the
         thermostability of a protein
    ΑU
         Matsumura, Masazumi; Yasumura, Shigeyoshi; Aiba, Shuichi
    SO
         Nature (London) (1986), 323(6086), 356-8
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- L7 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2002 ACS
- AN 1986:567953 CAPLUS
- TI Single amino acid replacements affecting the thermostability of kanamycin nucleotidyltransferase
- AU Matsumura, Masazumi; Kataoka, Shiro; Aiba, Shuichi
- SO MGG, Mol. Gen. Genet. (1986), 204(2), 355-8
- L7 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2002 ACS
- AN 1986:125702 CAPLUS
- TI Isolation of a thermostable enzyme variant by cloning and selection in a thermophile
- AU Liao, Hans; McKenzie, Tim; Hageman, Robert
- SO Proc. Natl. Acad. Sci. U. S. A. (1986), 83(3), 576-80
- L7 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2002 ACS
- AN 1985:610831 CAPLUS
- TI Screening for thermostable mutant of kanamycin nucleotidyltransferase by the use of a transformation system for a thermophile, Bacillus stearothermophilus
- AU Matsumura, Masazumi; Aiba, Shuichi
- SO J. Biol. Chem. (1985), 260(28), 15298-303
- L11 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2002 ACS
- AN 2000:673823 CAPLUS
- TI Plasmid for Coryneform bacteria with temperature-sensitive replicon
- IN Nakamura, Jun; Kanno, Sohei; Kimura, Eiichiro; Matsui, Kazuhiko; Nakamatsu, Wataru
- PA Ajinomoto Co., Inc., Japan
- SO Jpn. Kokai Tokkyo Koho, 23 pp.
- DT Patent
- LA Japanese

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| | | | | | |
| ΡI | JP 2000262288 | A2 | 20000926 | JP 1999-69896 | 19990316 |
| | US 6303383 | B1 | 20011016 | US 2000-521668 | 20000308 |
| | BR 2000001326 | A | 20010814 | BR 2000-1326 | 20000315 |
| | EP 1038966 | A1 | 20000927 | EP 2000-105326 | 20000316 |
| PRAI | JP 1999-69896 | A | 19990316 | | |

- L11 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2002 ACS
- AN 1997:496948 CAPLUS
- TI A new Thermus-Escherichia coli shuttle integration vector system
- AU Tamakoshi, Masatada; Uchida, Manabu; Tanabe, Kazuhiro; Fukuyama, Shiro; Yamagishi, Akihiko; Oshima, Tairo
- SO Journal of Bacteriology (1997), 179(15), 4811-4814
- L11 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2002 ACS
- AN 1995:78291 CAPLUS
- TI Stabilization of an enzyme using thermophiles and their laboratory evolution
- AU Osbima, Tairo
- SO Paiosaiensu to Indasutori (1994), 52(8), 639-41
- DT /Journal; General Review
- LA Japanese

- L11 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2002 ACS
- AN 1992:6273542 CAPLUS
- Development of Thermus-Escherichia shuttle vectors and their use for TΙ expression of the Clostridium thermocellum celA gene in Thermus thermophilus
- Lasa, Inigo; De Grado, M.; De Pedro, M. A.; Berenguer, Jose ΑU
- J. Bacteriol. (1992), 174(20), 6424-31 SO
- ANSWER 13 OF 22 CAPLUS COPYRIGHT 2002 ACS L11
- AN 1992:100315 CAPLUS
- ΤI Development of plasmid cloning vectors for Thermus thermophilus HB8: expression of a heterologous, plasmid-borne kanamycin nucleotidyltransferase gene
- Mather, Michael W.; Fee, James A. ΑU
- Appl. Environ. Microbiol. (1992), 58(1), 421-5 SO
- L11 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2002 ACS
- ΑN 1985:449154 CAPLUS
- Generation and detection of enzyme variants with enhanced thermostability TIand activity
- IN Liao, Hans H.; McDonell, Michael W.; Gold, Lawrence M.; Hirsh, David I.
- Synergen Associates, Inc., USA PA
- SO Eur. Pat. Appl., 51 pp.

| | PATENT NO. KIND | | DATE | APPLICATION NO. | DATE |
|------|-----------------|----|----------|-----------------|----------|
| | | | | | |
| ΡI | EP 138075 | A1 | 19850424 | EP 1984-111001 | 19840914 |
| PRAI | US 1983-532765 | | 19830916 | | |